

WATER RIGHTS HEARINGS FOR
APPLICATIONS FILED BY SOUTHERN
NEVADA WATER AUTHORITY IN
SPRING VALLEY (HA #184)

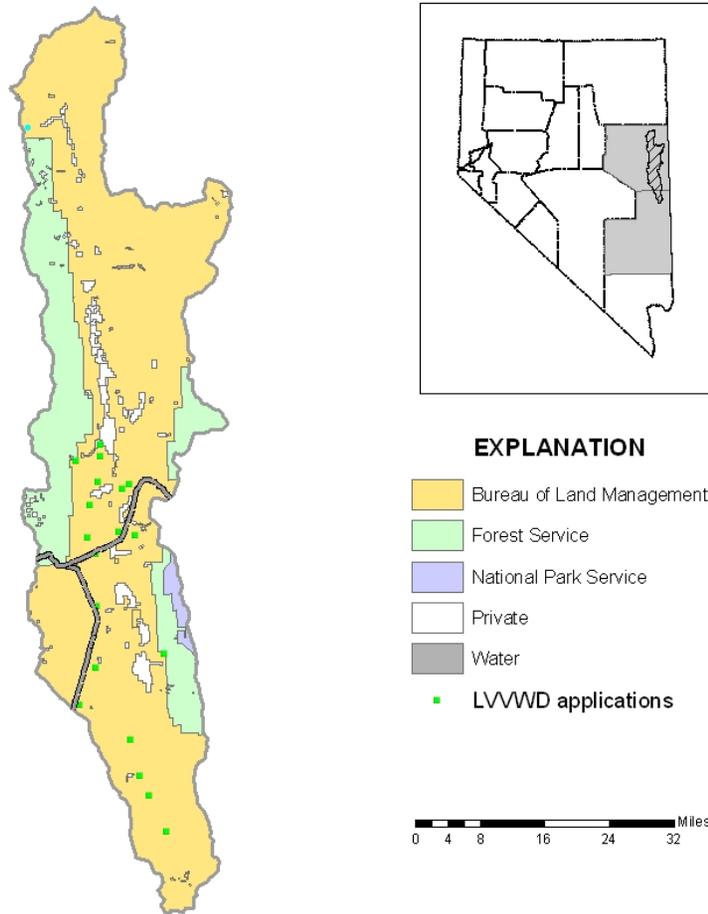
Robert A. Boyd
Bureau of Land Management
Nevada State Office
September 11-29, 2006

Federal Land Policy Management Act

- Legislative authority for BLM public-land management
- Specifies land management consistent with concepts of multiple use and sustained yield
- Multiple use concepts include recreation, commercial activities (livestock, timber, minerals), wildlife and fish habitat, and preservation of natural/historical values

BLM WATER RIGHTS POLICY

- States have primary authority for allocating/managing water resources
- Cooperate with state governments
- Conform to applicable state water rights laws, except as mandated by Congress
- Protect water rights of the United States
- Acquire and/or perfect water rights needed for public land management



Large areas of public land are in Spring Valley

Ground-water discharge and surface runoff sustain extensive water-dependent ecosystems

Phreatophytes and open water are vital for multiple-use land management activities in Spring Valley





BIOLOGICAL DIVERSITY

- Water-dependent ecosystems in Spring Valley provide habitat for diverse wildlife species including big game species, endemic fish species, birds (migratory, endemic, game, and raptors), bats, amphibians and reptiles, benthic invertebrates, and small mammals.

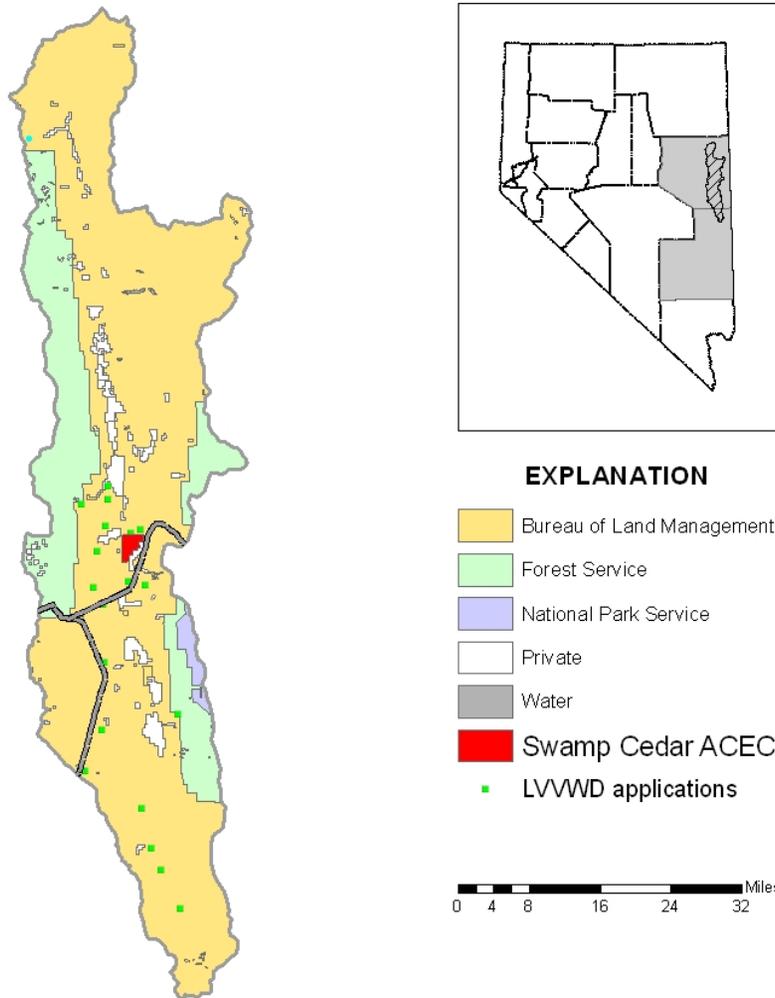
Swamp Cedar ACEC

Unique stand of Rocky Mountain juniper on valley floor in Great Basin

Sustained by shallow water table on clay soils

Provides habitat for raptors such as hawks

Historical battle site between Goshute Tribe and settlers in 1863.



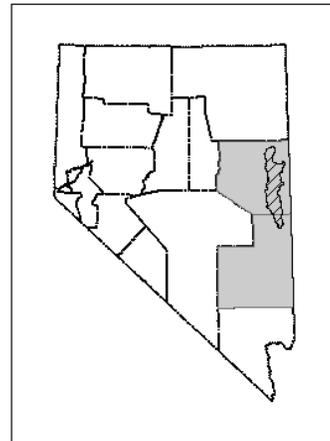
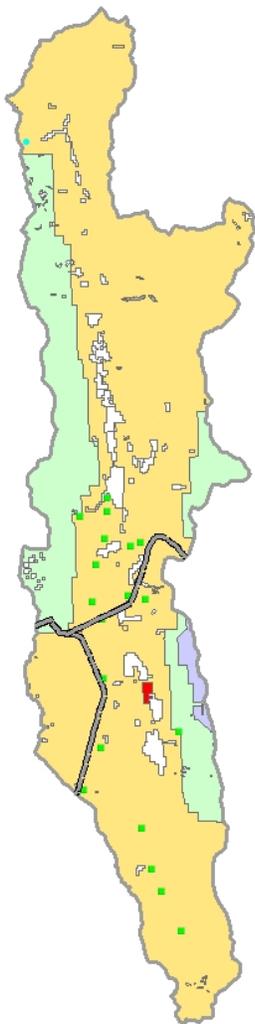


Shoshone Ponds ACEC

Provides a refugia for the endangered Pahrump poolfish and sensitive relict dace

Important water source for bat species that live in caves of the Snake Range

Historically significant construction by CCC in 1930s



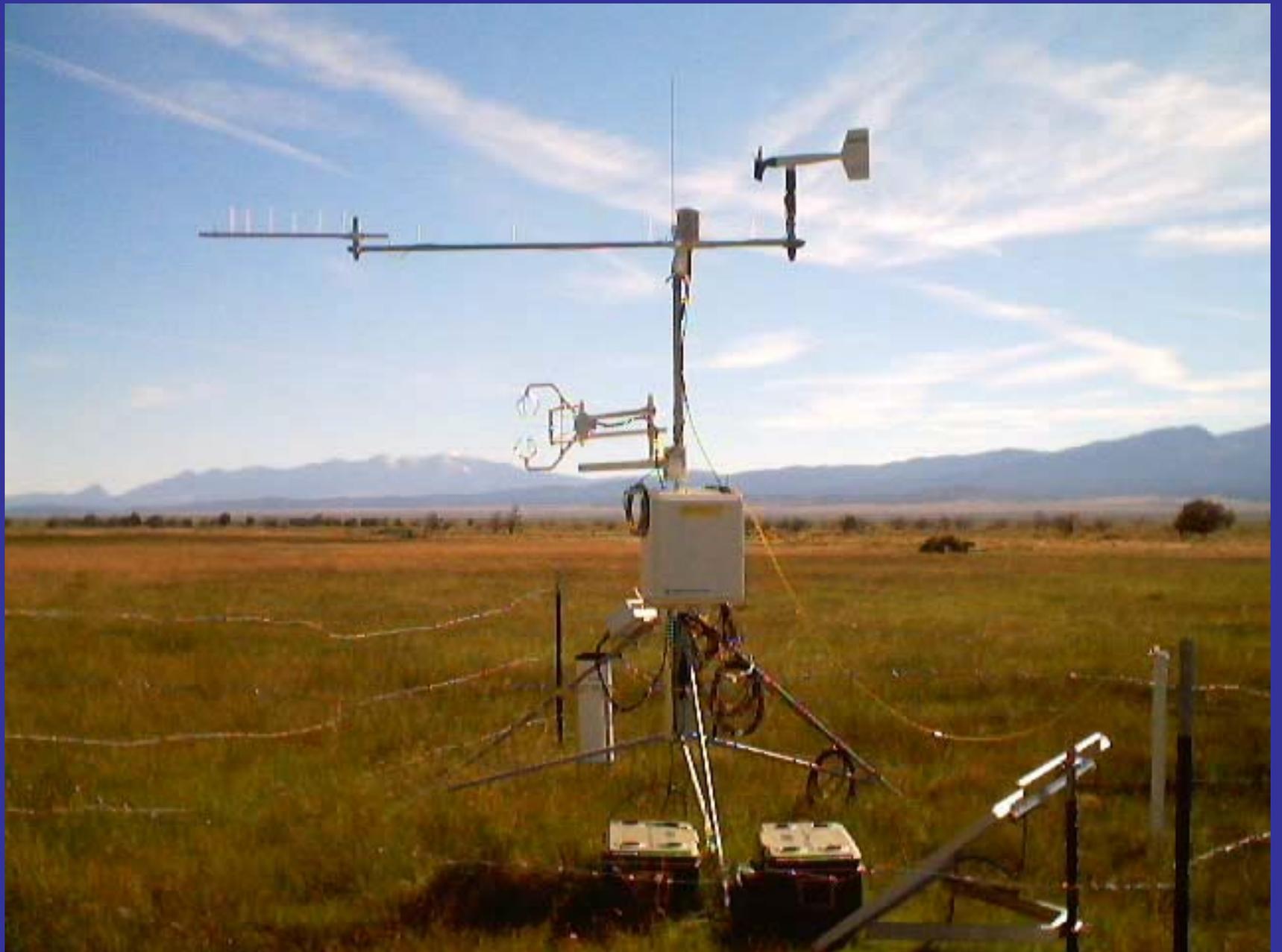
EXPLANATION

-  Bureau of Land Management
-  Forest Service
-  National Park Service
-  Private
-  Water
-  LVVWD applications
-  ShoshonePondsACEC

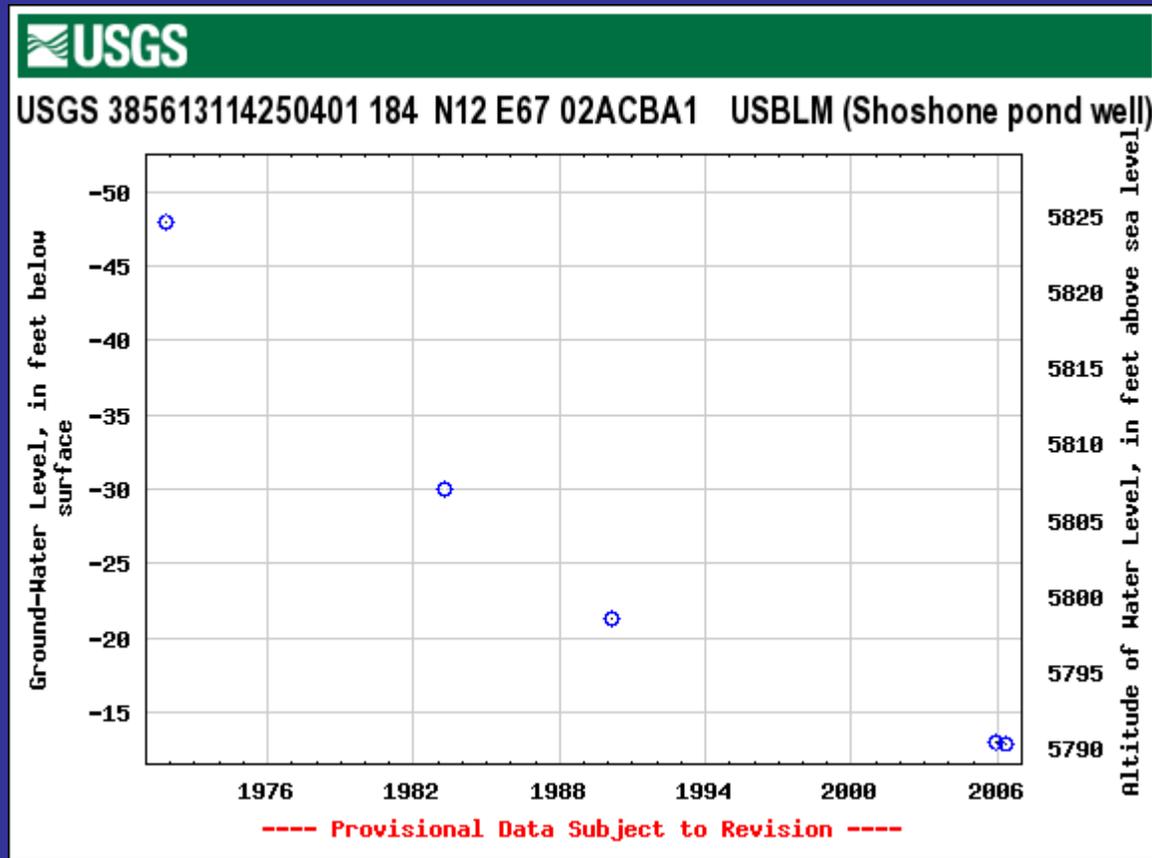
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Response of artesian water levels at Shoshone Ponds to local pumping

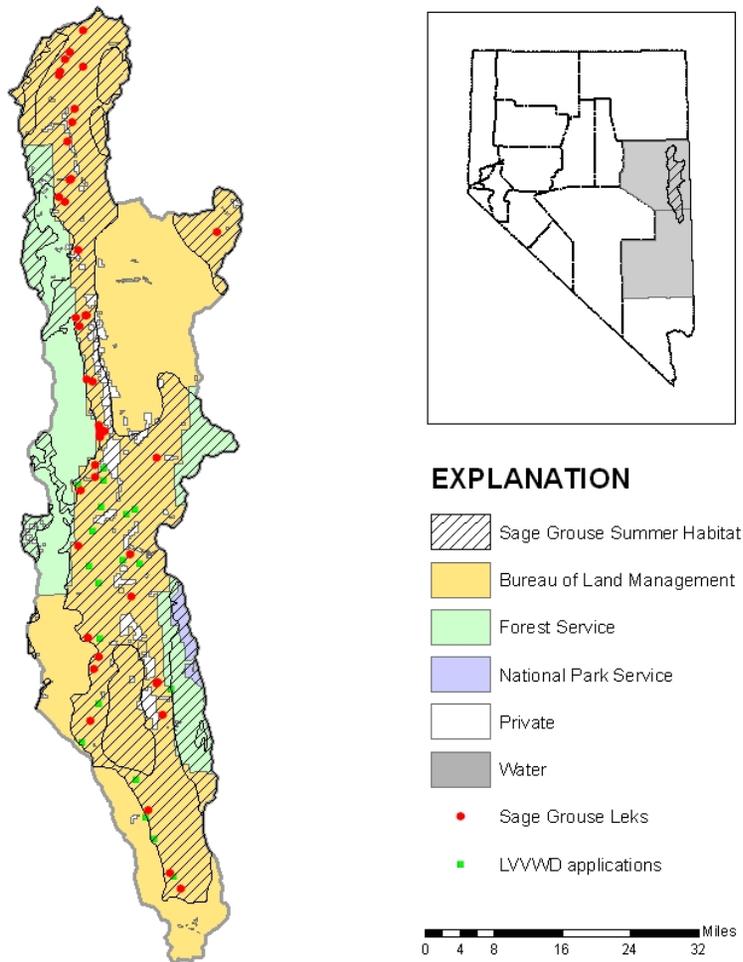


Sage Grouse Issues

Multi-state cooperative effort to avoid ESA listing by habitat conservation

Grouse use leks as annual breeding sites

Riparian and phreatophyte areas provide food and cover needed for brooding and summer habitat

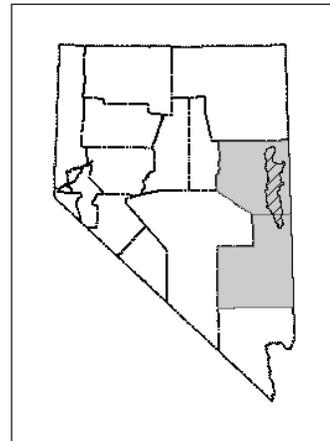
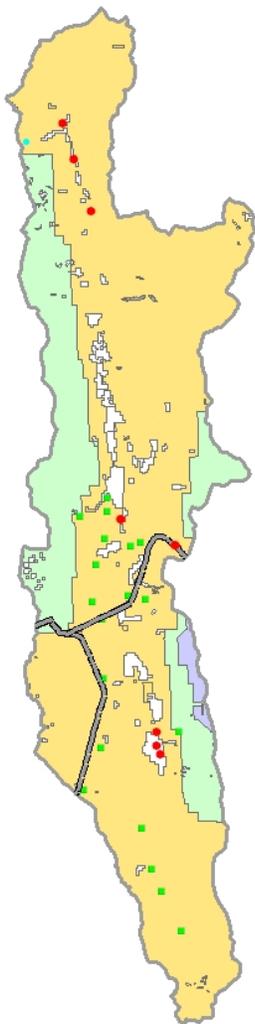


Spring Snails

Endemic populations isolated in select springs following retreat of Pleistocene-era lake

Listed as BLM Nevada sensitive species and managed to avoid listing under ESA

Snails highly sensitive to spring discharge changes



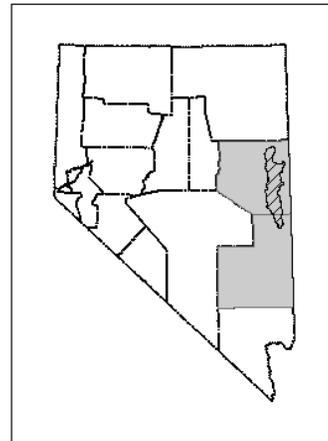
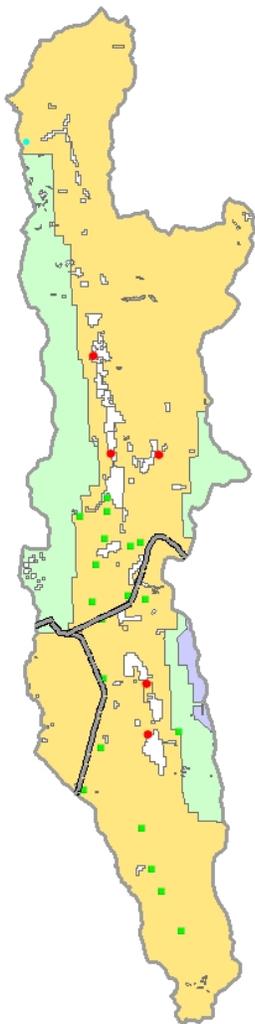
EXPLANATION

-  Bureau of Land Management
-  Forest Service
-  National Park Service
-  Private
-  Water
-  LVVWD applications
-  Spring Snails

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Northern Leopard Frog

Listed as BLM Nevada sensitive species and habitat managed to avoid listing under ESA



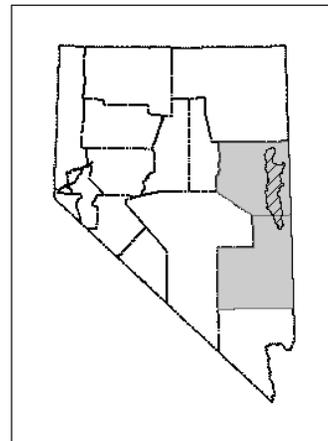
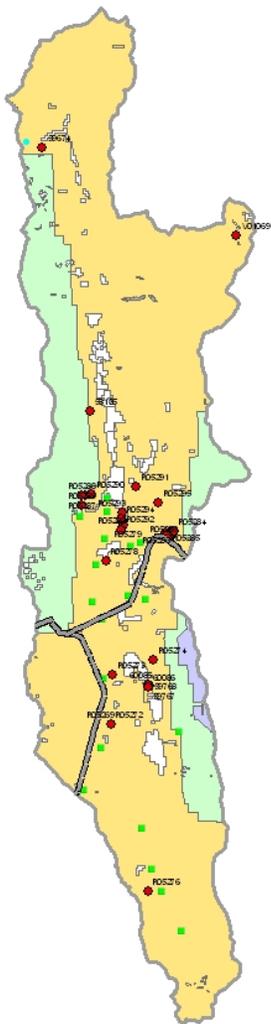
EXPLANATION

-  Bureau of Land Management
-  Forest Service
-  National Park Service
-  Private
-  Water
-  LVVWD applications
-  Leopard Frog Sites

0 4 8 16 24 32 Miles

Existing BLM Rights

Most BLM water rights in Spring Valley are Public Water Reserves on springs. The priority date for PWRS is 1926.



EXPLANATION

-  Bureau of Land Management
-  Forest Service
-  National Park Service
-  Private
-  Water
-  LVVWD applications
-  BLM Water Rights

0 4 8 16 24 32 Miles

GROUND-WATER AVAILABILITY

- SNWA has submitted 19 applications to export more than 91,000 acre-feet of ground water per year from Spring Valley

Recoverable Perennial Yield (Rush and Kazmi)	70,000 acre-feet/yr
Currently allocated (NDWR database)	18,737 acre-feet/yr
Available balance	51,263 acre-feet/yr

IMPACTS OF PROPOSED PUMPING

- Previously published ground-water flow models (USGS Great Basin RASA study, BLM EIS prepared for White Pine Power Project, and Principia Mathematica Inc. assessment prepared for Nye, Lincoln, and White Pine Counties) predict substantial water-table drawdown as a result of intensive ground-water pumping in Spring Valley

IMPACTS OF PROPOSED PUMPING

- BLMs EIS for the White Pine Power Project concluded a potential site in Spring Valley was not suitable because of impacts of ground-water pumping (at an annual rate of 25,000 acre-feet) on Shoshone Ponds
- Substantial water-table drawdown will greatly reduce or eliminate discharge at many springs and injure existing BLM senior water rights

IMPACTS OF PROPOSED PUMPING

- Substantial water-table drawdown will damage water-dependent ecosystems by greatly reducing or eliminating natural ground-water discharge. Ecosystem damage will deprive citizens of economic benefits and recreational opportunities and impair BLMs ability to manage public lands as mandated by Congress.

CONCLUSION

- The remaining balance of estimated perennial yield (51,263 acre-feet) in Spring Valley is insufficient for the quantity of water (more than 91,000 acre-feet) requested by SNWA applications
- Water-table drawdown from intense pumping will injure senior BLM water rights
- Intense pumping will capture natural discharge that sustains water-dependent ecosystems which provide economic benefit and recreational opportunities to citizens; damage to ecosystems will impair public-land management as mandated by Congress